



C

Appendix C Correspondence

Caroline_Hall@nps.gov; ethel_smith@os.doi.gov; Paul_Hawke@nps.gov;
Kristen_Stevens@nps.gov
Subject: I-81 Corridor Tier 1 DEIS Comments, ABPP/NPS (ER 05/116)

Mr. Roberto Fonseca-Martinez
Administrator
Virginia Division
Federal Highway Administration
Richmond, Virginia

Dear Mr. Fonseca-Martinez,

The American Battlefield Protection Program of the National Park Service appreciates the opportunity to provide technical comments on this important undertaking. VDOT has identified 10 battlefields within the highway improvement study area (p. 4-66) and five additional battlefields within the rail improvement study area (p. 4-69) (the Marion battlefield is within both study areas). As VDOT has determined, this project will have a significant impact on the Civil War battlefields along any of the build alternatives, whether highway or rail.

As FHWA begins to study the effects of the project alternatives on battlefields, ABPP strongly recommends that archeological features and patterns associated with each battle are examined. ABPP recommends the following archeological approach when identifying battlefield features: 1) review available literature and identify contributing features of each battlefield; 2) develop predictive research designs that prescribes various types of remote sensing techniques depending on the types of material/features expected to survive from each battle (systematic metal detector survey for locating metal artifacts, ground penetrating radar tests for locating graves and earthworks, proton magnetometer tests for locating areas of burnt soils, etc.); and 3) ensure that professional archeologists with battlefield survey experience conduct the field investigations. This approach should allow VDOT to conclusively determine the presence or absence of battle related artifacts and patterns and to understand how the proposed alternatives may impact the archeological record of the battles.

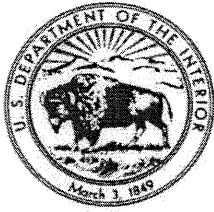
The ABPP also recommends cultural landscape features that contribute to the understanding of each battle are identified and evaluated, and visual and noise analysis applied from various interpretative points within each battlefield to the transportation project areas. Mitigation options for affected battlefields (under 4(f) and Section 106) should include archeological mitigation (identification, documentation, recovery, and curation). We agree with VDOT that highway or rail design should attempt to use median areas (where the land is determined to have lost integrity) where highway and rail improvements through the battlefields are unavoidable in order to limit further loss of historic ground with integrity.

The next steps in VDOT's I-81 Corridor study will be critical for the historic battlefields. ABPP staff members are available at all times to provide technical support to FHWA and VDOT regarding further project evaluation and assessment of battlefield lands and features. At this time, we would like to receive copies of correspondence between VDOT and VDHR in order to remain informed about the project and to determine if it is appropriate for ABPP to request to be a consulting party in accordance with 36 CFR 800.3(f) (3).

Thank you for considering these comments.
Sincerely,

Tanya M. Gossett
Preservation Planner
American Battlefield Protection Program
National Park Service
1849 C Street, NW (2255)
Washington, DC 20240-0001
202.354.2019
202.371.1961 fax

3/15/2005



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
Northeast Region
United States Custom House
200 Chestnut Street
Philadelphia, PA 19106

March 31, 2005

ER-05/116

Mr. Roberto Fonseca-Martinez
Division Administrator
Federal Highways Administration – Virginia
P.O. Box 10249
Richmond, Virginia 23240-0249

Subject: Technical Assistance Comments on the Preliminary Tier 1 Draft Environmental Impact Statement for the I-81 Corridor Improvement Study Project across the State of Virginia

Dear Mr. Fonseca-Martinez:

The Northeast Region of the National Park Service is pleased to be able to provide the following comments as technical assistance on the Preliminary Tier 1 Draft Environmental Impact (DEIS) Statement for the I-81 Corridor Improvement Study Project across the State of Virginia. These comments have been compiled through collaboration with the Appalachian National Scenic Trail, Cedar Creek and Belle Grove National Historical Park, and the Northeast Regional Office staff. As these comments are being provided on a technical assistance basis, they do not reflect the views and comments of the Department of the Interior.

The following comments refer specifically to the Appalachian National Scenic Trail and the proposed project's potential impacts to the Trail.

General Comments

Please refer to the Trail as the Appalachian *National Scenic* Trail to distinguish it from other trails. Also, we would appreciate proper recognition of the Trail in the Draft EIS by inclusion of a statement such as the following:

The Appalachian National Scenic Trail is a unit of our National Park System, and our nation's premier national long-distance hiking trail – a continuous, marked, 75-year-old, 2,167-mile footpath that traverses the Appalachian Mountain chain through 14 states from central Maine to northern Georgia. It is also a treasure of scenic and natural wonders, as evidenced by the actions taken by United States Congress and the

old, 2,167-mile footpath that traverses the Appalachian Mountain chain through 14 states from central Maine to northern Georgia. It is also a treasure of scenic and natural wonders, as evidenced by the actions taken by United States Congress and the Commonwealth of Virginia to designate the Appalachian Trail. In 1968, Congress passed the National Trails System Act, which designated the Appalachian Trail as the nation's first national scenic trail and authorized federal land acquisition to establish a permanent route and protective corridor surrounding the footpath. And in 1973, Virginia passed the Virginia Appalachian Trail Act "to provide for the ever-increasing outdoor recreation needs of an expanded population and in order to promote public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas of the state" and to encourage protection of the Trail as part of the National Scenic Trails System. The Trail today is administered by the National Park Service in cooperation with the USDA Forest Service, numerous state agencies (including the Virginia Department of Conservation and Recreation), the Appalachian Trail Conference, and the Conference's 31 affiliated Trail clubs.

This reference may be most appropriately inserted on pages 4-56 and 4-57 of the document.

At least one of the alternatives also contemplates improvements to Route 220 at Daleville, which would necessitate another crossing of the Appalachian National Scenic Trail. This should be reflected in all aspects of the analysis.

Specific Comments

Figure 4.1-1, Sheet 2 of 11: This figure accurately reflects lands that are administered for the protection of the Appalachian National Scenic Trail.

Figure 4.1-1, Sheet 5 of 11: This figure shows the general location of the footpath of the Appalachian National Scenic Trail, but does not accurately depict lands that are administered for the protection of the Appalachian National Scenic Trail. These lands should be shown on the map. Geographic information system data are available from the Appalachian Trail Park Office. Contact Casey Reese at (304) 535-4009 or casey_reese@nps.gov.

Figure 4.1-2, Rail Segment 8: This figure shows the general location of the footpath of the Appalachian National Scenic Trail, but does not accurately depict lands that are administered for the protection of the Appalachian National Scenic Trail. These lands should be shown on the map. Geographic information system data are available from the Appalachian Trail Park Office. Contact Casey Reese at (304) 535-4009 or casey_reese@nps.gov.

Page 4-53, Table 4.5-2: The Appalachian National Scenic Trail also should be identified as a Specific Visual Resource under the Northern Shenandoah Valley Landscape Province.

Page 4-56, Table 4.6-1: If potential rail segments are intended to be included in this table, the Appalachian National Scenic Trail also intersects Rail Segment 8.

Pages 4-56, 4-57, Part 4.6.1.1: See note under General Comments above.

Page 4-64, Table 4.7.1: The Appalachian National Scenic Trail may be eligible for the National Register of Historic Places. We have not been provided with a copy of the referenced *I-81 Corridor Improvement Study Cultural Resources Technical* Report, so we are unable to discern whether or not the Trail was considered in the report. Please provide us with a copy of the relevant portions of the report.

Page 4-68, Table 4.7.2: The Appalachian National Scenic Trail may be eligible for the National Register of Historic Places. We have not been provided with a copy of the referenced *I-81 Corridor Improvement Study Cultural Resources Technical* Report, so we are unable to discern whether or not the Trail was considered in the report. Please provide us with a copy of the relevant portions of the report.

Figure 4.8-1, Sheet 2 of 11: Please provide us with more detailed information regarding the occurrence of threatened and endangered species in the vicinity of milepost 55. This occurrence is not identified in our inventory. Information may be sent to Don Owen of the Appalachian Trail Park Office at donald_owen@nps.gov.

Page 5-37: This narrative as currently written is not sufficient. It needs to be written in enough detail so that reviewers and the general public can understand how different sensitive visual resources are affected and to what degree. This can be done through a narrative, or through a table that incorporates the 28 sensitive visual resources and provides an estimation of the degree of impact associated with each alternative.

Table 5.6-1, Page 5-39: We believe that sufficient information exists to be able to conduct a preliminary estimate of the number of acres associated with the Appalachian National Scenic Trail that would be affected by all three alternatives. Please contact Casey Reese at (304) 535-4009 or caseyreese@nps.gov.

Page 5-41: We disagree with the statement that "widening of the road for each of the Build Concepts is not expected to result in a constructive use of this 4(f) recreation facility..." No such determination has been made. This statement should be deleted from the narrative per the last sentence of the second paragraph of 5.8.1.1.

Page 5-54: If potential rail segments are intended to be included in this table, the Appalachian National Scenic Trail also intersects Rail Segment 8. Development may be constrained if the

proposed improvements to this 11,000-foot section of railroad extend as far east as the crossing of the Appalachian National Scenic Trail.

Table 6.2-1, Page 6-4: The ongoing analysis of the Interchange at Exit 150 (Daleville) should be added to this table.

Should you require any additional information or have any questions regarding any matter concerning the Appalachian National Scenic Trail, please contact Don Owen of the Appalachian Trail Park Office by phone at (304) 535-4003 or by email at donald_owen@nps.gov.

The following comments were prepared by the Northeast Regional and Cedar Creek and Belle Grove National Historic Park staff and reflect our review of the Historic Properties presented in Section 4.7 of the Preliminary Tier 1 DEIS.

It is clear from the Preliminary Tier 1 DEIS that many historic resources are located within the area of potential effect of the various alternatives that are under consideration to improve I-81 in Virginia. These include a wide variety of resource types ranging from individual structures to major Civil War battlefields. As we do not have access to the I-81 Corridor Improvement Study Cultural Resources Technical Report, we do not know the number of archeological sites that are located within the study area. However, we do want to point out that many of the historic structures identified in Section 4.7.1.1 may have archeological components that require evaluation and consideration. We also want to emphasize that the battlefields within the project area also require careful identification and evaluation efforts to adequately assess their significance and integrity. We support the recommendations regarding methodologies for identification and evaluation of the battlefields provided to you by the American Battlefields Protection Program (letter dated March 8, 2005 from Tanya Gossett).

While the Preliminary Tier 1 DEIS does identify the Cedar Creek Battlefield, it does not acknowledge that Cedar Creek and Belle Grove National Historic Park was established on December 19th, 2002 as a unit of the National Park Service by Public Law 107-373. Two of the purposes stated for establishment of the park are to "help preserve, protect, and interpret a nationally significant Civil War landscape and antebellum plantation for the education, inspiration, and benefit of present and future generations" and to "preserve the significant historic, natural, cultural, military, and scenic resources found in the Cedar Creek battlefield and Belle Grove Plantation areas through partnerships with local landowners and the community..." The Park's boundary is established as 3000 acres which is bisected by the existing I-81 corridor. An expansion of the roadbed of I-81 will directly impact the Cedar Creek Battlefield -- including its historic, cultural, military and scenic resources. Changes to the interchanges of I-81 at exits 298 and 302 have the potential to impact the scenic resources of the national park -- inasmuch as they are likely to be visible from various locations within the national park. Changes to the I-81 corridor and its intersections are also likely to have visual impacts on the Belle Grove Manor

House and Heater Hall, both of which are also part of a National Historic Landmark, and are currently listed on the Virginia Landmarks Register.

We have similar concerns with the potential effects of the proposed project on the resources designated as the Shenandoah Valley Battlefields National Historic District which are located near I-81 including First Kernstown, First Winchester, Second Kernstown, Second Winchester, New Market Battlefield, Tom's Brooks, Fisher's Hill, Cedar Creek Battlefield, and Third Winchester - and which are included within the Shenandoah Valley Battlefields National Heritage Area. Please note that as a federally authorized commission, the Shenandoah Valley Battlefields National Historic District Commission should be consulted with in the same manner as other federal agencies.

We would appreciate receiving a copy of the I-81 Corridor Improvement Study Cultural Resources Technical Report to provide background on the specifics of the cultural resource investigations for the project to date in preparation for participation in later stages of project planning and review. At this time it appears that there may be many significant Section 4(f) issues to be addressed in the future.

For your information, Diann Jacox is the Superintendent of Cedar Creek and Belle Grove National Historic Park and can be reached at 540-868-9176 or Diann_Jacox@nps.gov.

Thank you for the opportunity to comment on this preliminary document. We do hope that you find these comments useful as you proceed to the Tier 2 stage of the study. Should you have any questions, please contact Lloyd Chapman at 215-597-2334 or Lloyd_Chapman@nps.gov.

Sincerely,



Jacquelyn L. Katzmire
Regional Environmental Coordinator

bcc:

OEPC, AS/PMB®, AS/FWP
REO/PHL

NPS

SHPO – Virginia

NPS-NER, RP&C Philadelphia

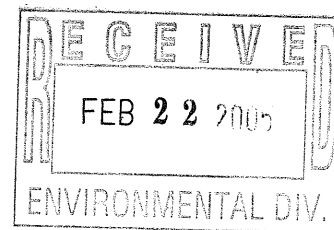
Donald Owen – APPA

Diann Jacox – CEBE

Note: This NPS response was initially drafted by L.Chapman, NER-RP&C-Philadelphia based on review of the subject document and input from the Appalachian National Scenic Trail, Cedar Creek and Belle Grove National Historic Site, and the American Battlefield Protection Program



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1499



February 16, 2005

Mr. Roberto Fonseca-Martinez
Division Administrator
Federal Highway Administration
Attn: John Simkins
Post Office Box 10249
Richmond, Virginia 23240

Dear Mr. Martinez:

**PRELIMINARY TIER 1 DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) –
INTERSTATE 81 CORRIDOR STUDY, VIRGINIA**

Thank you for the opportunity to review the preliminary DEIS for the proposed I-81 improvement concepts in Virginia. The project has the potential to affect the Middle Fork of the Holston River for appreciable distances. Therefore, we appreciate the inclusion of TVA as a cooperating agency in the NEPA review for this project. It appears that the major environmental issues have been addressed.

In Section 4.4, Agricultural Land, it could be mentioned that a research farm for the American Chestnut Foundation is located in Meadowview (milepost 25). This facility breeds American chestnut trees for blight resistance. The location of this facility in relation to I-81 could be mentioned.

In Section 5.9, Natural and Geologic Resources, Permit Issues (draft page 5-64), please add that in the Holston River watershed, permits under Section 26a of the TVA Act would likely be required.

In Section 5.15, Cumulative Impacts, major corridor projects that junction with I-81 and add traffic, and cumulatively stress the same Ridge and Valley and Blue Ridge area resources could be mentioned. We are aware of the US 58 corridor improvement project and the I-73 corridor between Roanoke and Greensboro.

TVA appreciates the opportunity to serve as a cooperating agency on this project. We look forward to receiving a copy of the DEIS when it is released. Should you have any questions, please contact Harold M. Draper at (865) 632-6889 or hmdraper@tva.gov.

Sincerely,

Jon M. Loney, Manager
NEPA Administration
Environmental Policy and Planning

cc: See Page 2



DEPARTMENT OF THE ARMY
NORFOLK DISTRICT, CORPS OF ENGINEERS
FORT NORFOLK, 803 FRONT STREET
NORFOLK, VIRGINIA 23510-1096

REPLY TO
ATTENTION OF:

February 18, 2005

Eastern Virginia Regulatory Section
03-6811-15

Mr. Roberto Fonseca-Martinez
Division Administrator
Federal Highway Administration
Post Office Box 10249
400 N. 8th Street, Room 750
Richmond, Virginia 23240

Dear Mr. Fonseca-Martinez:

This letter provides the comments of the Norfolk District Corps of Engineers on the Preliminary Tier I Draft Environmental Impact Statement (DEIS) prepared for the I-81 Corridor Improvement Study in Virginia. The Federal Highway Administration (FHWA) and the Virginia Department of Transportation (VDOT) are preparing the EIS, and the Corps of Engineers is a cooperating agency in the preparation of documents for this project. In our review of the pre-DEIS, we focused on the content of the document and the way the information was presented, and in particular on those portions of the document concerning aquatic resources.

As much as possible, we will direct our comments to specific pages in the document.

Page 4-73: The text indicates that streams are graphically displayed in Figure 4.8-1. However, the figure apparently only displays streams containing threatened and endangered species and impaired streams. It may be that, since our copy is in black and white, the color version makes the other streams apparent. If not, the figures should be revised to show all streams.

This page of the document addresses rivers and perennial streams. Although you may not have quantified them at this level of review, the document should at least mention intermittent streams. Intermittent streams are regulated by the Corps in the same manner that perennial streams are regulated, with the same requirements for avoidance and minimization and compensation for unavoidable impacts. See also our comments below for pages 5-60 and 5-64.

Pages 4-75, 76, 77: As written, this section on wetlands suggests that Waters of the United States is a subset of wetlands, when the reverse is true. The sentence at the bottom of 4-75 should be changed to read "Waters of the United States include wetlands and surface waters such as lakes, ponds, and streams..." The document states (4-75) that "vegetated wetland systems are found..." Wetlands are by definition vegetated (one of the three parameters), so it is suggested that you delete the word "vegetated," because it suggests there are other wetlands that are not vegetated. Similarly, on page 4-77, ponds are described as palustrine wetlands. We understand that the basis for this terminology is Cowardin's classification. However, to avoid confusion for the reader between what is typically perceived as

wetlands (i.e., meeting three parameters, including vegetation), we recommend that you revise the text and identify ponds as Waters of the U.S. rather than as wetlands.

On page 4-76, in the first full paragraph, the description of wetlands in the study area implies that all of the wetlands are isolated ("generally restricted to fringe wetlands around farm ponds, isolated emergent systems..., and isolated pockets of forested wetlands..."), which is apparently not the case. The next several paragraphs describe the wetlands as "associated with stream bottoms...associated with stream bottoms and floodplains...associated with springs and seeps ...that serve as headwater stream complexes." These descriptions appear to more accurately depict the wetlands in the region. The first paragraph should be revised to describe the wetlands in this manner.

Page 4-94,95,96: The same comments as above for pages 4-73,74,75,76 concerning the depiction of streams on the figures and the description of wetlands apply in this section as well.

Page 5-49: The impacts to battlefields (as shown in tables on page 5-48 and 5-49) appear to be very high. It is recommended that some evaluation be provided as to the relative quality of the areas of battlefield to be impacted. When given simply as acres compared to acres, recommendations regarding the relative impacts of the alternatives cannot take into account the value of those acres. Typically, although perhaps not in the case of these battlefields, areas within the mapped boundaries of battlefields include developed areas (commercial and residential). If that is the case, then an acre with a building on it is not equivalent to an acre of open land for comparative purposes.

Page 5-57,58: The discussion of surface waters does not address navigation. Elsewhere in the document references are made to canoeists using some of the waters crossed by I-81, addressing visual impacts and aesthetics. The document should also address navigation on any such waterways, and whether any of the Concepts will affect navigation.

Page 5-59: The text indicates that in the southern portion of I-81, the current alignment runs along streams for long distances. It goes on to say that engineering measures may be pursued to shift the centerline to avoid and minimize impacts to streams in such areas. The text should be changed to read that such measures "will be evaluated", not "may be pursued," in order to insure avoidance and minimization have been fully addressed.

Page 5-60: The top of the page notes that while ponds are not specifically quantified for Tier I, impacts are expected. Similarly, it should be noted that impacts to intermittent streams will occur.

Under Wetland Impacts, the term "field-verified wetland areas" is used. Elsewhere in the document, it has been stated that wetlands were identified using existing information with some windshield surveys. "Field-verified" implies that field reviews were conducted, with wetland boundaries determined, which apparently has not occurred. It is recommended that you change the sentence to delete the term "field-verified."

At the bottom of the page, it is noted that raised rail beds traverse wetland systems along rivers and floodplains. It would be helpful to note if those beds are largely on fill or on bridges.

Page 5-61: The term "higher-valued" is used to refer to scrub-shrub and forested wetlands as opposed to emergent wetlands. Scrub-shrub and forested wetlands are no more valuable as a category than emergent wetlands, although they may be more valuable on a case-by-case basis (and vice versa). Unless you have information to support that the specific wetlands to which you refer are more or less valuable than others, you should not use that terminology.

Page 5-64: It is stated that the Corps may take jurisdiction over water features such as intermittent streams and roadside ditches. While it is true that the Corps has jurisdiction over some ditches and not others, all intermittent streams are regulated by the Corps. "Intermittent streams" should be deleted from the sentence.

Similarly, the next paragraph starts with "Perennial streams and wetlands are considered jurisdictional..." Intermittent streams are also jurisdictional. The word "perennial" should be deleted from the sentence.

It is stated that some of the waterways to be crossed may be regulated under Section 10 because they are navigable. Permits may also be required from the U. S. Coast Guard to cross these waters.

Page 5-73,74: The document should address the issue of fragmentation of wildlife habitats, which is not mentioned.

Page 5-76: In the sentence about culvert design, you should add that pipes will be countersunk so as not to impede the movement of aquatic organisms. It is stated that it may not be economically feasible to bridge trout streams. It is understood that further detail is not available for Tier I, but later documents should specifically address the practicability of bridging each trout stream.

Page 5-112: The paragraph describing cumulative effects should include battlefields along with agricultural land and soils, because it appears that there is a potential for substantial losses of battlefield acres.

Page 5-114: The first paragraph under the heading for 5.16.1 states that waters are regulated by both the Corps and VDEQ under Section 404 of the Clean Water Act. VDEQ does not regulate under that section of the Act, but rather under Section 401. The document should refer to Section 401 as well as the appropriate state law.

Page 6-5: It is recognized that this is a Tier I document, and that the level of detail typically found in a DEIS is not expected for the decisions to be made. However, we are concerned about the potential segments of roadway on new location that will apparently be part of some of the build alternatives, but are not being evaluated at this time. It is important to consider whether the impacts associated ultimately with those segments will impact resources at a level that requires reconsideration of some of the decisions made about concepts at this time. In particular, if it is found that impacts to waters of the U.S. are substantial for any of the segments on

new location, we will still require evaluation of all alternatives that avoid and minimize those impacts.

Page 7-4: It is stated that the Environmental Protection Agency was the only agency to provide written input following the November 2003 Partnering meeting. The Corps provided comments for I-81 along with other projects in a letter dated December 19, 2003 and addressed to FHWA.

We request a copy of the *I-81 Corridor Improvement Study Wetlands and Water Resources Technical Report* at the time that the DEIS is forwarded to the Corps for comments.

Concerning the evaluation of historic and cultural resources for the I-81 Corridor study, according to 36 CFR 800.2(a)(2):

"...If more than one Federal agency is involved in an undertaking, some or all [of] the agencies may designate a lead Federal agency, which shall identify the appropriate official to serve as the agency official who shall act on their behalf, fulfilling their collective responsibilities under section 106. Those Federal agencies that do not designate a lead Federal agency remain individually responsible for their compliance with this part."

Pursuant to the above provision, the FHWA (Virginia Division) is hereby designated as the lead federal agency to fulfill the collective Federal responsibilities under Section 106 for the I-81 Corridor project.

The Corps authorizes FHWA to conduct Section 106 coordination on its behalf. Any Memorandum of Agreement prepared by FHWA under 36 CFR 800.6 should include the following clause in the introductory text:

"WHEREAS, pursuant to Section 10 and/or Section 404 of the Clean Water Act, a Department of the Army permit will likely be required from the Corps of Engineers for this project, and the Corps has designated FHWA as the lead federal agency to fulfill federal responsibilities under Section 106; and

As a cooperating agency, we appreciate the opportunity to review and comment on the pre-DEIS. We trust that our comments and recommendations will be fully addressed, with a goal of the Corps being able to adopt the EIS prepared by FHWA as part of our compliance with the National Environmental Policy Act.

Should you have any questions, you may contact Alice Allen-Grimes at 757-201-7219.

Sincerely,



Nicholas L. Konchuba
Chief, Eastern Virginia
Regulatory Section

Copies Furnished:

Virginia Department of Transportation, Richmond
Environmental Protection Agency, Reston
U. S. Fish and Wildlife Service, Gloucester
National Marine Fisheries Service, Oxford
Virginia Department of Environmental Quality/Water Division, Richmond

-----Original Message-----

From: Peter M Stokely [<mailto:pstokely@usgs.gov>]

Sent: Friday, February 18, 2005 2:08 PM

To: Markham, Loretta A.; Peter Stokely (E-mail); WILLIAM_HESTER@FWS.GOV; Simkins, John; Collins, C. G. 'Chris'; Alice.W.Allen-Grimes@nao02.usace.army.mil; Myers, Kenneth

Cc: arguto.william@epa.gov

Subject: I-81 Pre-Draft EIS Comments

Thank you for the opportunity to review the pre-Draft Environmental Impact Statement (DEIS) for the I-81 Corridor Study located in western Virginia. The Environmental Protection Agency (EPA) recognizes that some of the questions or issues below may be addressed somewhere in the document, however EPA recommends that these issues be highlighted and addressed in more detail in the Executive Summary or addressed in the appropriate sections of the DEIS.

Comments on Tiering:

Tiering under the National Environmental Policy Act (NEPA) is intended to address broad programs, issues or concepts in a "Tier 1" document, resulting in a decision on program direction or concept development. The analysis of more specific alternatives to implement the selected programs or concepts is left for the "Tier 2" document(s). Tier 2 documents can be Environmental Assessments (EA), Environmental Impact Statements (EIS) or even Categorical Exclusions (CE). The use of the Tiering Process for I-81 is generally consistent with the approach in other states in our region for big projects (I-95 widening from north of Baltimore to the Delaware line). However, the I-81 Tier 1 DEIS is unique in the respect that a rather detailed alternative, put forward by private enterprise, Star Solutions, is one of the improvement concepts being considered and the Tier 1 DEIS includes a freight rail improvement study, which identifies potential improvements to freight rail service which may effect traffic on I-81, that cannot be paid for by either the lead federal agency, the Federal Highway Administration (FHWA) or the Virginia Department of transportation (VDOT). This raises several questions that need clarification and disclosure in the Tier 1 DEIS.

2/20/2005

The Tier 1 DEIS should clearly disclose if the decisions made in the Tier 1 document "lock in" future decisions to be made in the Tier 2 Document. For example, if Concept 1 is selected after Tier 1 review, does this lock in the number of lanes required for improvement in any one section, or will the actual number of lanes be determined after factoring in more detailed environmental and traffic studies in Tier 2? Additionally, the Tier 1 DEIS should disclose the details of the Star Solutions recommendations and address how these detailed recommendations for truck only lanes, the number of lanes, flyovers, pavement type, etc, fit into this broader decisions that should result from the Tier 1 DEIS. For example, if the Star Solutions recommendation (Concept 2) is selected in Tier 1 will alternatives or modifications to the Star Solutions alternative be evaluated in Tier 2?

The Tier 1 DEIS should explain more clearly what decisions will be made as a result of the Tier 1 analysis. For example will the tolling options (low toll, high toll) be evaluated in the Tier 2 document or will tolls and the level of tolls be exclusively a Tier 1 decision? There are bullets on page 1-2 that indicate what the Tier 1 decisions will be, but additional narrative details on the decisions to be made based on the Tier 1 DEIS and subsequent Tier 2 documents is recommended. The Tier 1 DEIS should clearly state if tolls will be required to build these improvements or if state and federal money can cover the improvements if tolls are not selected. If tolling is not an option will the improvement concepts be reduced in scope or otherwise changed?

The relationship between the improvement concepts and the sections of independent utility should be better explained. For example, will each section of independent utility identified for Tier 2 study have each of the four improvement concepts included in the Tier 2 DEIS for that section, or will only one improvement concept be forwarded for Tier 2 study?

The Tier I DEIS should place more emphasis (Executive Summary, Affected Environment, Environmental Consequences) on the unique, historical and scenic nature of the Shenandoah Valley and what efforts will be made to protect the resources of the valley and its vistas. EPA recommends an outreach program be established for interested stakeholders that have specialized knowledge and interest in the conservation of the valleys resources.

It is also noted of the eight sections with independent utility that are being moved forward for Tier 2 Studies, 7 of the projects will require an EIS and one is proposed as an EA. Based on projected impacts, EPA supports the rational and use of the EIS for those projects and we will make our recommendations on the EA/FONSI or EA/EIS once we have reviewed that document.

Rail Study

Please explain in more detail why the rail study is included in this document and how it will aid in decision-making regarding I-81

2/20/2005

improvements. Since the rail improvements are far removed from the I-81 corridor, how will the rail portion of the study be related to the sections of independent utility? It is not clear why the rail study is part of the I-81 DEIS if FHWA or VDOT cannot pay for any rail improvements that may be identified. Do the traffic forecasts for 2035 assume that the identified rail improvements will be in place? How will the results of the rail study impact the number of new lanes being considered for I-81?

Executive Summary:

Please include a more thorough summary of the major issues expected in each EIS and EA that will follow in Tier 2. The table on page ii is a good start but additional details, such as the specific nature of the Section 4(f) and 106 issues should be given. For each Section 4(f) issue the name of the resource should be listed. The type of impact should be indicated. For example, will the impacts be due to right of way impacts, noise, visual or other? Also explain why the impacts to battlefield areas are projected to be in the 1000's of acres and when will Area of Potential Effect (APE) decisions be made. It appears that impacts to battlefields are going to be one of the larger impacts from any of the build alternatives. EPA recommends that this impact be thoroughly evaluated in the Tier 2 documents and a commitment to finding ways to avoid and minimize these impacts be made in the Tier 1 DEIS and Record of Decision (ROD).

Are the conceptual level improvements along the entire highway or just portions? It seems as if the southernmost 7-8 miles is not addressed by any of the areas of independent utility.

Environmental Consequences:

When discussing the relative differences in impacts between alternatives, please briefly explain why there are the differences in impact. For example the truck separation alternative has fewer impacts to battlefields but the reason for this is not explained. Explain why the high toll options have greater impact to battlefields but in some cases lower residential displacements.

Affected Environment:

The methods used to determine wetland and stream resources should be better explained, not just referred to as being in a technical document. For example explain if the data on wetlands was gathered from NWI alone or NWI in combination with other sources of data. This comment would apply to the other resources mapped in this section.

When referring to wetlands on page 4-76, please drop the use of the word isolated, as this is a regulatory decision. Perhaps use the word scattered.

Chris Collins



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
6669 Short Lane
Gloucester, VA 23061



February 15, 2005

Mr. John Simkins
Federal Highway Administration
P.O. Box 10249
Richmond, Virginia 23240-0249

Re: Tier 1 Pre-Draft Environmental
Impact Statement: Interstate 81
Corridor Improvement Study

Dear Mr. Simkins:

The U.S. Fish and Wildlife Service (Service) has reviewed the Tier 1 Pre-Draft Environmental Impact Statement (pre-DEIS) for the Interstate Highway 81 Corridor Improvement Study, that we received on January 21, 2005. The study would include the entire portion of the I-81 corridor located in Virginia. This letter constitutes the scoping comments of the Service and the Department of the Interior on the proposed project and is submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), and the National Environmental Policy Act of 1969 (NEPA) (42 USC, subsections 4321-4370a, as amended).

Endangered Species Act Comments

Since federally listed species occur in the vicinity of the proposed project, the Federal Highway Administration (FHWA) must determine whether the project may affect any of these species. A biological assessment pursuant to Section 7(c) will therefore be required for this project. We will be pleased to discuss the consultation process with you.

If a Federal agency determines a project to be a major Federal construction activity significantly affecting the quality of the human environment (i.e., one requiring an environmental impact statement under the National Environmental Policy Act), Section 7(c) of the Endangered Species Act, as amended, requires that the agency prepare a biological assessment to determine the effects of the project on listed and proposed species that may occur in the project impact area. The biological assessment shall be completed before any contract for construction is entered into and before construction is begun. The contents of the biological assessment depend on the nature of the Federal action. In general, the U.S. Fish and Wildlife Service (Service) recommends the following steps be taken:

1. Conduct a scientifically sound on-site inspection of the area affected by the action, which must in most cases include a detailed survey of the area to determine if listed or proposed species are present or occur seasonally and whether suitable habitat exists within the area for either expanding the existing population or potential reintroduction of populations.
2. Interview recognized experts on the species at issue, including those within the Service, State conservation agencies, universities, and others who may have data not yet found in scientific literature.
3. Review literature and other scientific data to determine the species' distribution, habitat needs, and other biological requirements.
4. Analyze the effects of the action on individuals and populations of each species and its habitat, including indirect and cumulative effects of the action.
5. Analyze alternative actions that may provide conservation measures.
6. Conduct any studies necessary to fulfill the requirements of (1) through (5) above.
7. Review any other relevant information.

If the Federal action agency determines that the proposed action may affect any listed species or critical habitat, the agency must request, in writing, formal consultation with the Service pursuant to Section 7(a)(2). If the action agency determines that the action is likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat, the agency must confer with the Service.

If the determination is "no effect," neither consultation nor conference is necessary, unless requested by the Fish and Wildlife Service. A copy of the biological assessment document should be provided to the Fish and Wildlife Service.

Fish and Wildlife Coordination Act Comments

We note that there is no discussion in the pre-DEIS of habitat enhancement/restoration for migratory birds. Based on the pre-DEIS, between 1,400 and 1,600 acres of upland forested habitat may be destroyed by this roadway improvement. In our December 12, 2003 scoping comments on the project, the Service recommended that enhancement of fish and wildlife resources be made an intricate part of this study and overall project. There are numerous opportunities along this corridor to improve water quality and compensate migratory bird habitat while making the transportation corridor more aesthetically pleasing for motorists. Such opportunities include:

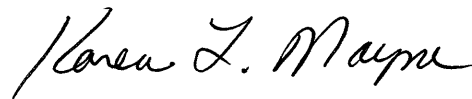
- o Protection and creation of large blocks of natural habitat throughout the corridor: Establishing green zones along the corridor would provide a more aesthetically pleasing travel experience, a natural noise buffer for residents within the roadway vicinity, and wildlife habitat.
- o Establishment of forested riparian buffers adjacent to existing waterways within the study area.

In accordance with Executive Order 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds) the Service recommends that a section on upland forest restoration be added to the pre-DEIS with a commitment by FHWA to provide upland forest restoration to benefit migratory birds and water quality.

Similarly, the pre-DEIS does not include a commitment to compensate wetlands, streams, or floodplains that would be impacted by these roadway improvements. Text should be added to this effect.

The Service appreciates the opportunity to comment on this project. If you have questions, please contact William Hester at (804) 693-6694, extension 134.

Sincerely,

A handwritten signature in black ink, reading "Karen L. Mayne". The signature is written in a cursive, flowing style.

Karen L. Mayne
Supervisor
Virginia Field Office

cc: VDOT, Richmond, VA (Chris Collins)



United States Department of the Interior

U. S. GEOLOGICAL SURVEY

Reston, VA 20192

In Reply Refer To:
Mail Stop 423
ER 05/116

March 4, 2005

MEMORANDUM

To: John Simkins
Federal Highway Administration, Virginia Division
Richmond, VA

From: James F. Devine /*Katherine Lins signed for*/
Senior Advisor for Science Applications

Subject: Review of Technical Assistance on the Preliminary Tier 1 Draft Environmental Impact Statement for the I-81 Corridor Improvement Study Project across the State of Virginia

As requested by the U.S. Department of the Interior, Office of Environmental Policy and Compliance, in their correspondence of February 8, 2005, the U.S. Geological Survey (USGS) has reviewed the subject draft environmental impact statement (EIS) and offers the following comments.

GENERAL COMMENT:

As the document reviewed is a request for technical assistance, we would like to take this opportunity to remind the Virginia Department of Transportation that the USGS has collected natural resources data and information which might be useful for future project impact assessment and development. Much of the USGS information is currently accessible directly from our website at <http://www.usgs.gov>.

A specific example is data and information from the USGS Breeding Bird Survey (BBS). Information from the BBS, which records historic bird occurrence, can be accessed from <http://www.mbr-pwrc.usgs.gov/>. These data can help to provide informational guidelines on the soundness of ecological conditions, such as for woodlands or wetlands in western Virginia.

Thank you for the opportunity to review and comment on this draft EIS.

Copy to: Office of Environmental Policy and Compliance

Response to National Park Service, American Battlefield Protection Program, letter dated March 15, 2005

Response:

The recommendations provided by the American Battlefield Protection Program will be taken under consideration during Tier 2 studies, if a “Build” concept is advanced, when more refined project alternatives are developed and evaluated. Since the Tier 1 EIS only addresses potential broad corridor-length concepts (as opposed to site-specific alternatives), the level of detail suggested for the identification of battlefield resources, the impact analysis on those resources, and the identification of mitigation for unavoidable impacts is commensurate with the level of detail that would be performed for Tier 2 studies.

Response to National Park Service, letter dated March 31, 2005

1) Appalachian Trail Comments

Additional information has been added to Chapter 4, *Affected Environment* of the DEIS and the *Historic Properties Technical Report* regarding the Appalachian National Scenic Trail

In terms of potential visual impacts to the Trail, the Tier 1 DEIS states that the degree to which the landscape would change for viewers of the road or rail would be minimal, regardless of which "Build" concept is advanced. In those cases where people currently have unobstructed views of the I-81 or the rail corridor, the magnitude of impact is not expected to be great since viewers already see an interstate or a rail line while using these resources. The addition of highway lanes, rail improvements, or improvements to existing interchanges on I-81 would not appreciably change the visual character of existing I-81 or the rail line.

At this point, for Tier 1, all potential impacts characterized in the Tier 1 DEIS are preliminary estimates based on readily available resource data, and based on conceptual level improvements. The potential impacts are subject to change based on additional resource studies and design refinements that would occur during Tier 2, if a "Build" concept is advanced. If a "Build" concept (or portion of a "Build" concept) is advanced into Tier 2, more detailed visual analyses would be completed.

In terms of potential constructive use of the Trail, you are correct in stating that no such determination has been made. Chapter 5, Section 5.8 states that the specific type of use of each affected property cannot be determined at this stage of the study although preliminary estimates of direct encroachment on some Section 4(f) properties have been provided for comparison. This section goes on to state that while widening the road and/or rail line is not expected to result in a constructive use of parks and/or trails in the I-81 or rail corridors, a final determination of constructive use would be determined during Tier 2, if a "Build" concept (or portion of a "Build" concept) is advanced, in conjunction with input from the officials having jurisdiction over the property.

2) Historic Properties Comments

Detailed resource investigations and impact analyses suggested in the letter are at a level of detail that goes beyond the intent of this Tier 1 study. The level of data collection and analyses required for full Section 106 compliance is commensurate with the level of detail developed for Tier 2 studies.

Unlike a traditional EIS that evaluates impacts from a specific "project" or "action", this Tier 1 EIS evaluates potential impacts from broad "concepts" for

which only the most preliminary design information is developed. As indicated in the Tier 1 Draft EIS, the level of resource identification and impact analysis undertaken for this Tier 1 study does not fully satisfy the requirements of Section 106. Rather, if a "Build" concept (or portions of a "Build" concept) is advanced, compliance with Section 106 would occur during Tier 2 including additional investigations and analyses to 1) identify historic properties, 2) determine the effects on those historic properties, and 3) develop appropriate mitigation measures for unavoidable impacts to historic properties.

Response to Tennessee Valley Authority, letter dated February 16, 2005

Response:

- 1) The Meadowview Research Farms associated with the American Chestnut Foundation is not mentioned in the Tier 1 Draft EIS because it is outside of the study area defined for the *I-81 Corridor Improvement Study*.
- 2) In Chapter 5, Section 5.9, *Natural and Geologic Resources*, a paragraph has been added to reflect the fact that portions of I-81 are within the Holston River watershed and therefore permits under Section 26a of the TVA Act would likely be required for construction within those areas.
- 3) For Cumulative Impacts, future roadway projects that intersect I-81 were added as long as they met two criteria: 1) they were included in VDOT's 6-Year Improvement Program, and 2) they were fully funded through construction.

Response to U.S. Army Corps of Engineers, letter dated February 18, 2005

All general editorial comments have been incorporated into the revised Tier 1 DEIS. In addition, the Tier 1 DEIS addressed more substantive comments as noted below.

1) Stream Comments

All streams are graphically displayed in the figures and visible when viewed in color.

The Tier 1 DEIS was revised to acknowledge that, in addition to perennial streams, at least 80 additional intermittent streams (and streams that have not yet been determined as being either perennial or intermittent) are in the study area. In addition, the text has been revised to note that at least 960 linear feet of intermittent streams could potentially be impacted. This number is likely to increase, however, since Tier 1 did not include the field analysis required to determine whether some water features in the I-81 corridor were intermittent (marked as “unknown”). The perenniality of “unknown” features would be determined during later stages of project development, if a “Build” concept (or portion of a “Build” concept) is advanced into Tier 2.

The Tier 1 DEIS has been revised to address navigation, stating that “relatively minor streams flowing through culverts or pipes would likely continue to be conveyed as such, whereas larger bridged streams would likely be spanned similarly. As such, it is assumed for this Tier 1 level study that navigation in navigable waters would not be affected by either highway or rail improvements.”

The revised Tier 1 DEIS has been revised to state that “during later stages of project development, if a “Build” concept (or portion of a “Build” concept) is advanced, additional engineering measures would be considered, as appropriate, to address Section 404 permitting requirements.” Avoidance and minimization measures would be appropriately addressed in Tier 2.

2) Wetland Comments

The Tier 1 DEIS was revised to more accurately refer to wetlands as a subset of Waters of the United States. Also, the words “vegetated” and “isolated” were deleted when referring to wetland systems. Finally, the revised Tier 1 DEIS addresses ponds (Cowardin classification PUB) within the Lakes and Impoundments subsection, and removed them from the Wetlands subsection.

References to “field-verified” wetland boundaries were eliminated from the Tier 1 DEIS.

Based on preliminary field investigations, the study team used best professional judgment to generally distinguish between wetlands of relatively low functional value (e.g. small depressions in fields, maintained drainage channels) and wetlands of relatively higher functional value based on their relative floral and faunal diversity, habitat quality, maturity, uniqueness, and/or rarity. Wetlands having relatively higher functional values included emergent and scrub shrub systems, forested wetlands, and beaver ponds. Each specific wetland was evaluated in the field as described in more detail in the *Wetland and Water Resources Technical Report*. A more detailed functional values assessment for impacted wetlands would be completed during later stages of project development, if a “Build” concept (or portion of a “Build” concept) is advanced into Tier 2

3) Battlefield Comment

A discussion of the relative quality of the areas of potentially impacted was not included in the Environmental Consequences chapter for the Tier 1 DEIS. The resource investigations necessary for that type of analysis is at a level of detail that goes beyond the intent of this Tier 1 study. At this point, for Tier 1, all potential impacts characterized in the Tier 1 DEIS are preliminary estimates based on readily available resource data, and based on conceptual level improvements. The potential impacts are subject to change based on additional resource studies and design refinements that would occur during Tier 2, if a “Build” concept is advanced.

As indicated in the Tier 1 Draft EIS, the level of resource identification and impact analysis undertaken for this Tier 1 study does not fully satisfy the requirements of Section 106. Rather, if a “Build” concept (or portion of a “Build” concept) is advanced, compliance with Section 106 would occur during Tier 2 including additional investigations and analyses to 1) identify historic properties, 2) determine the effects on those historic properties, and 3) develop appropriate mitigation measures for unavoidable impacts to historic properties.

The Tier 1 DEIS has been revised to include battlefields in the discussion of cumulative affects.

4) Wildlife and Habitat Comments

If a “Build” concept (or portion of a “Build” concept) is advanced, Tier 2 documents would specifically address the practicability of bridging each trout stream.

The Tier 1 DEIS has been revised to state that “Improvements to either I-81 or the rail lines are not expected to cause additional fragmentation of wildlife habitats since both transportation corridors already exist and have created a barrier for the movement of wildlife. If a “Build” concept (or portion of a “Build” concept) is

advanced into Tier 2, opportunities to enhance wildlife movement across improved transportation facilities would be considered as necessary.”

Comment #1 The Tier 1 DEIS should clearly disclose if the decisions made in the Tier 1 document "lock in" future decisions to be made in the Tier 2 Document. For example, if Concept 1 is selected after Tier 1 review, does this lock in the number of lanes required for improvement in any one section, or will the actual number of lanes be determined after factoring in more detailed environmental and traffic studies in Tier 2?

Response:

In 2035, at least 37 percent of I-81 needs one additional lane in each direction. For these sections, the "Build" concepts under consideration are only those that provide for one additional lane in each direction. Most of the remaining sections of I-81 need more than one lane in each direction in 2035. Decisions on improvements to those sections (e.g., the separation of cars from commercial vehicles) would be determined in Tier 2 when more site-specific information is available, if a "Build" concept (or portion of a "Build" concept) is advanced. In addition, the application of tolls or improvements to rail facilities would decrease the number of vehicles on I-81. Such a reduction would reduce the number of miles on I-81 that need more than one additional lane in each direction.

Decisions on the number of lanes to be constructed for sections that need more than one lane would be made at the conclusion of Tier 2, if a "Build" concept (or portion of a "Build" concept) is advanced.

Comment #2 Additionally, the Tier 1 DEIS should disclose the details of the Star Solutions recommendations and address how these detailed recommendations for truck only lanes, the number of lanes, flyovers, pavement type, etc, fit into the broader decisions that should result from the Tier 1 DEIS. For example, if the Star Solutions recommendation (Concept 2) is selected in Tier 1, will alternatives or modifications to the Star Solutions alternative be evaluated in Tier 2?

Response:

While the Tier 1 DEIS evaluates separated facility concepts, the specific concept proposed by Star Solutions is no longer under consideration. The "Build" concepts that are under consideration in this Tier 1 Draft EIS are at an appropriate level of detail to allow a comparison of the differences in the range of costs and potential impacts of the improvement concepts. In addition, the level of analysis on the range of potential effects of conceptual-level improvements on the social, economic, and environmental setting is commensurate with the decisions being made in Tier 1.

Comment #3 The Tier 1 DEIS should explain more clearly what decisions will be made as a result of the Tier 1 analysis. For example will the tolling options (low toll, high toll) be evaluated in the Tier 2 document or will tolls and the level of tolls be exclusively a Tier 1 decision? There are bullets on page 1-2 that indicate what the Tier 1 decisions will be, but additional narrative details on the decisions to be made based on the Tier 1 DEIS and subsequent Tier 2 documents is recommended. The Tier 1 DEIS should clearly state if tolls will be required to build these improvements or if state and federal money can cover the improvements if tolls are not selected.

Response:

Section 1216(b) of the Transportation Equity Act for the 21st Century (TEA-21) established a toll pilot program to allow conversion of a free Interstate highway into a toll facility. In their application to FHWA, under Section 1216(b) of TEA-21, VDOT stated that I-81 could not be functionally improved without the collection of tolls because federal and state funding is not adequate to improve the facility within a reasonable time frame. The application indicates that a combination of several financing options offers the best case for funding an improved I-81. These financing options include traditional “pay-as-you-go” funding methods, toll revenue bonds, federal earmarks, and debt. After a review of VDOT’s application, FHWA issued “conditional provisional approval” to make I-81 a toll facility. As part of the toll pilot process, VDOT would have to develop a financial plan.

In Tier 1, a decision is not being made on a toll rate, but on the concepts to be advanced, regardless of toll structure. Different toll rates were studied in conjunction with the “Build” concepts in order to examine the diversions from I-81 that may occur if tolls were implemented. Changes in the required lane configuration that would result from these different toll rates were also studied. The effects of the range of toll scenarios will support informed decision-making on the concepts to be advanced. If one or more of the “Build” concepts (or portions of “Build” concepts) are advanced into Tier 2, the effects of various toll rates would again also be studied in Tier 2.

Comment #4 If tolling is not an option, will the improvement concepts be reduced in scope or otherwise changed?

Response:

See Response to Comment #1 and Response to Comment #3.

Comment #5 The relationship between the improvement concepts and the sections of independent utility should be better explained. For example, will each section of independent utility identified for Tier 2 study have each of the four improvement concepts included in the Tier 2 DEIS for that section, or will only one improvement concept be forwarded for Tier 2 study?

Response:

If, in Tier 1, one or more of the “Build” concepts (or portions of “Build” concepts) are advanced into Tier 2, those “Build” concepts will be analyzed in each of the Sections of Independent Utility in detail in subsequent Tier 2 NEPA documents. Also, see response to Comment #1. For those sections of I-81 that only need one additional lane in each direction in 2035, the “Build” concepts under consideration are only those that provide for one additional lane in each direction. For the remaining sections (those that need at least two additional lanes in each direction), decisions on improvements to those sections (*e.g.*, the separation of cars from commercial vehicles) would be determined in Tier 2 when more site-specific information is available, if a “Build” concept (or portion of a “Build” concept) is advanced.

Comment #6) The Tier 1 DEIS should place more emphasis (Executive Summary, Affected Environment, Environmental Consequences) on the unique, historical, and scenic nature of the Shenandoah Valley and what efforts will be made to protect the resources of the valley and its vistas. EPA recommends an outreach program be established for interested stakeholders that have specialized knowledge and interest in the conservation of the valley’s resources.

Response:

For this Tier 1 analysis, potential visual impacts are discussed broadly, based on conceptual-level improvements to an existing interstate facility. Regarding views from the road, impacts to the visual quality of the corridor for motorists depends primarily on specific design elements that may obstruct views or detract from observing visual resources in the foreground, middle ground or background, such as noise walls, signs or other structures. Tier 1 is evaluating conceptual-level improvements and these design elements would be more appropriately addressed in Tier 2, if one or more of the “Build” concepts (or portions of “Build” concepts) are advanced into Tier 2.

Regarding views of the road, since I-81 already exists, the degree to which the visual landscape would change as a result of the addition of highway lanes or improvements to the interchanges would be minimal, irrespective of the “Build” concept. A detailed evaluation of impacts for views from the road and views of the road would be completed during Tier 2 analyses, based on detailed roadway design, if one or more of the “Build” concepts (or portions of “Build” concepts) are advanced into Tier 2.

Comment #7) It is also noted of the eight sections with independent utility that are being moved forward for Tier 2 Studies, 7 of the projects will require an EIS and one is proposed as an EA. Based on projected impacts, EPA supports the rationale and use of the EIS for those projects and we will make our recommendations on the EA/FONSI or EA/EIS once we have reviewed that document.

Response:

The preliminary Tier 1 Draft EIS that EPA reviewed did indicate that the Tier 2 NEPA documents for seven of the eight Sections of Independent Utility (SIU) would be EISs. The Tier 1 Draft EIS was subsequently modified and now indicates that, if one or more of the “Build” concepts (or independent portions of “Build” concepts) are advanced into Tier 2, Environmental Assessments or categorical exclusions are being proposed as the type of Tier 2 NEPA document for each SIU. In accordance with 23 CFR 771.117(d), CEs could only be prepared if it is clear that the environmental effects of the action would not be significant. The EAs or CEs would be the means through which the detailed analyses associated with Tier 2 would be conducted. For any smaller independent projects within the SIUs, CEs may be prepared. Based on the detailed information in the EAs or CEs, informed decisions would be made on the significance of the impacts.

The EAs or CEs prepared in Tier 2 would be the means through which the detailed analyses associated with Tier 2 would be conducted. Based on the detailed information in these documents EAs, informed decisions would be made on the significance of the impacts.

Comment #8) Please explain in more detail why the rail study is included in this document and how it will aid in decision-making regarding I-81 improvements. Since the rail improvements are far removed from the I-81 corridor, how will the rail portion of the study be related to the sections of independent utility? It is not clear why the rail study is part of the I-81 DEIS if FHWA or VDOT cannot pay for any rail improvements that may be identified.

Response:

There is a strong public interest in studying the ability of rail improvements to divert freight (i.e., trucks) off of I-81 in Virginia. This interest was widely known before the initiation of the NEPA process, and many such comments were provided as part of the NEPA scoping process. With this as background, FHWA and VDOT committed in the *Process Streamlining Agreement Between the Virginia Department of Transportation and the Federal Highway Administration on the Interstate 81 Corridor National Environmental Policy Act Process* (see Appendix A) to study rail concepts as potential solutions for improved future travel on I-81 within the Commonwealth of Virginia. As discussed in a letter, dated January 28, 2004, from FHWA to VDOT (see Appendix B), toll revenues collected on I-81 cannot be used to implement rail improvements. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), however, contains \$41.5 million of designated

funding to “manage freight movement and safety improvements along I-81”. SAFETEA-LU also includes a number of general freight finance provisions that offer possible funding mechanisms to improve privately-owned rail facilities.

While some of the “Build” concepts involve potential improvements to I-81 and potential improvements to privately owned rail facilities, the improvements to such railroads would be at the discretion of Norfolk Southern. As such, there is no relationship between any rail component of the “Build” concepts and the Sections of Independent Utility. If Norfolk Southern implements the potential rail improvements, the construction sequence and sections may vary from the Sections of Independent Utility.

Comment #9) Do the traffic forecasts for 2035 assume that the identified rail improvements will be in place? How will the results of the rail study impact the number of new lanes being considered for I-81?

Response:

The rail concepts offer some measurable benefit to I-81 traffic operations, but they have a minimal effect on travel lane requirements. The traffic forecasts for 2035 do not assume that potential rail improvements are in place at that time.

Comment #10) Please include [in the Executive Summary] a more thorough summary of the major issues expected in each EIS and EA that will follow in Tier 2. The table on page ii is a good start but additional details, such as the specific nature of the Section 4(f) and 106 issues should be given. For each Section 4(f) issue the name of the resource should be listed. The type of impact should be indicated. For example, will the impacts be due to right of way impacts, noise, visual or other?

Response:

This Tier 1 EIS provides information on the potential construction impacts to Section 4(f) properties (*i.e.*, direct acquisition). Section 5.8, *Section 4(f)/6(f)* acknowledges that, in addition to direct use of land from Section 4(f) properties, impacts may occur from constructive use whereby the property is not acquired in any way but the features that qualify the resource for Section 4(f) consideration are substantially impaired because of the proximity of proposed improvements. The text indicates, however, that the specific type of use of each affected Section 4(f) property cannot be determined at this stage of the study although preliminary estimates of direct encroachment on some Section 4(f) properties have been provided for comparison. Characterization of use of these resources associated with roadway improvements would be evaluated during Tier 2, if one or more of the “Build” concepts (or portions of “Build” concepts) are advanced into Tier 2.

Section 5.7, *Historic Properties* acknowledges that, in addition to direct impacts from construction, other types of effects to historic properties can occur as a result of an undertaking. These can include removing the property from its historic location, changing the character of the property's use or setting when they contribute to its significance, and introduction of visual, atmospheric, or audible elements that diminish the integrity of the significant features. While all or some of these effects may occur as result of the improvement concepts, the analysis in the Tier 1 EIS does not address these effects because the level of engineering available for the Tier 1 improvement concepts is insufficient to evaluate these effects. Consultation with the VDHR and other consulting parties and the public concerning the full range of effects to historic properties would be undertaken during the Tier 2 process, if one or more of the "Build" concepts (or portions of "Build" concepts) are advanced into Tier 2.

Comment #11) Also, explain why the impacts to battlefield areas are projected to be in the 1000's of acres and when will Area of Potential Effect (APE) decisions be made. It appears that impacts to battlefields are going to be one of the larger impacts from any of the build alternatives. EPA recommends that this impact be thoroughly evaluated in the Tier 2 documents and a commitment to finding ways to avoid and minimize these impacts be made in the Tier 1 DEIS and Record of Decision (ROD).

Response:

The "Build" concepts that are evaluated in the Tier 1 EIS range from a non-separated highway-only improvement concept to a combined separated facility concept with rail improvements and rail-only improvements. The range of direct impacts to battlefields was calculated by superimposing the footprints for the Minimum Width template and for the Maximum Width template, as well as for Rail Concept 3, over Geographical Information System (GIS) data available for battlefields. Each footprint represents the potential limits of construction. Depending on the template, the width of the footprint varies from approximately 360 feet to 540 feet along I-81.

Where the footprint and GIS data overlapped, an impact was assumed. At interchanges along I-81, the footprint widths were expanded to accommodate the anticipated type of interchange improvement (*i.e.*, diamond or cloverleaf interchange). For rail improvements, a 100-foot footprint was generally used for calculating impacts because it represents the potential limits of rail construction. At this point, for Tier 1, all potential impacts characterized in the Tier 1 DEIS are preliminary estimates based on readily available resource data, and based on conceptual-level improvements. The potential impacts are subject to change based on additional resource studies and design refinements that would occur during Tier 2, if a "Build" concept (or portion of a "Build" concept) is advanced. If a "Build" concept (or portion of a "Build" concept) is advanced into Tier 2, more detailed impact analyses would be completed.

There are two reasons why there are projected to be large areal impacts to the battlefields. First, many battlefields are adjacent to I-81, especially in the northern portion of the corridor. Second, since, in some cases, the boundaries of the battlefields encompass the median and since the footprint of the improvement concepts include the median of I-81, these areas were assumed to be affected.

If, in Tier 1, one or more of the “Build” concepts (or portions of “Build” concepts) are advanced into Tier 2, those “Build” concepts would be analyzed in more detail in subsequent Tier 2 NEPA documents and the impacts presented may decrease because design refinements would likely change the potential construction limits. The formal Section 106 process for individual projects, involving identification of historic properties, decisions on Areas of Potential Effect, assessment of adverse effects, and resolution of adverse effects would occur in Tier 2. During the formal Section 106 process, there would be consultation with the State Historic Preservation Officer, the Advisory Council on Historic Preservation, and other parties with an interest in the effects on historic properties to seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.

Comment #12) Are the conceptual level improvements along the entire highway or just portions? It seems as if the southernmost 7-8 miles is not addressed by any of the areas of independent utility.

Response:

Potential improvements would occur along the entire length of I-81 in Virginia. As now indicated in Chapter 6, *Tier 1 Decisions To Be Made*, the first Section of Independent Utility is from the Tennessee State Line (Milepost 0) to Exit 72 (I-77) near Wytheville.

Comment #13) When discussing the relative differences in impacts between alternatives, please briefly explain why there are the differences in impact. For example, the truck separation alternative has fewer impacts to battlefields but the reason for this is not explained. Explain why the high toll options have greater impact to battlefields but in some cases lower residential displacements.

Response:

The preliminary Tier 1 Draft EIS that EPA reviewed was subsequently modified. The impact templates and the associated impacts from the “Build” concepts evaluated in the Tier 1 Draft have since been changed and these discrepancies no longer occur.

Comment #14) The methods used to determine wetland and stream resources should be better explained, not just referred to as being in a technical document. For example, explain if the data on wetlands were gathered from NWI alone or NWI in combination with other sources of data. This comment would apply to the other resources mapped in this section.

Response:

Section 4.8, *Physical and Natural Resources* now indicates that rivers, perennial streams, and wetlands within the I-81 and rail study areas were identified based on available GIS data, the Scoping Process, and windshield surveys. *The I-81 Corridor Improvement Study Wetlands and Water Resources Technical Report*, an appendix to the DEIS, contains additional detailed information on the methods used to identify and analyze wetland and water resources.

Available GIS data included NWI and USGS hydrographic information. These GIS layers were modified to reflect conditions viewed in the field.

Comment #15) When referring to wetlands on page 4-76, please drop the use of the word isolated, as this is a regulatory decision. Perhaps use the word scattered.

Response:

The word “isolated” has been deleted from Section 4.8, *Physical and Natural Resources* and from *The I-81 Corridor Improvement Study Wetlands and Water Resources Technical Report*.

Response to U.S. Fish and Wildlife Service, letter dated February 15, 2005

1) The U.S. Fish and Wildlife Service's comments make reference to the proposed "project". As a point of clarification, the Tier 1 Draft EIS evaluates broad conceptual-level improvements ("concepts"). In fact, one of the chief purposes of the Tier 1 National Environmental Policy Act (NEPA) process is to identify individual projects, if any, that would be studied during the Tier 2 process. No construction can occur at the conclusion of Tier 1. Rather, a Tier 2 NEPA document would have to be prepared for any individual project before construction could occur.

2) Endangered Species Act Comments

By its very nature, preparation of a biological assessment pursuant to Section 7(c) of the Endangered Species Act requires the collection and analysis of data at a level of detail that goes beyond the intent of this Tier 1 study. The level of data collection and analyses required for Section 7 consultation is commensurate with the level of detail developed for Tier 2 studies.

Unlike a traditional EIS that evaluates impacts from a specific "project" or "action", this Tier 1 EIS evaluates potential impacts from broad "concepts" for which only the most cursory design information is developed. As indicated in the preliminary Tier 1 Draft EIS, if one or more "Build" concepts are advanced, then Section 7 consultation would occur during Tier 2 for the individual "project(s)" identified from the Tier 1 process. Determining the effect of a project on any listed species is appropriate when more detailed design information is available.

3) Fish and Wildlife Coordination Act Comments

If one or more "Build" concepts are advanced, the detailed analysis of individual projects that would occur in Tier 2 would likely result in a refinement of impact numbers. For this Tier 1 study, the estimate of potential impacts was based on GIS data and a generalized impact templates. It would be more appropriate to discuss detailed enhancement and restoration possibilities during Tier 2 when more precise information on resources is collected, and when more detailed design information is developed for individual projects. FHWA and VDOT would continue to consult with the USFWS on all appropriate issues during Tier 2 evaluation of individual project(s), if a "Build" concept is advanced.

The Tier 1 DEIS states that "during Tier 2, unavoidable impacts to jurisdictional waters of the United States (including wetlands) would be compensated as appropriate" and "appropriate compensation for floodplain impacts would be identified during Tier 2."

Response to United States Department of the Interior, U.S. Geological Survey, letter dated March 4, 2005

As recommended, the database information available from the USGS would be used to assist with future project impact assessments during Tier 2 studies, if a “Build” concept (or portion of a “Build” concept) is advanced.